



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,975	09/29/2006	Masahiro Nakamura	063049	8187
38834	7590	05/12/2008	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP			MEROUAN, ABDERRAHIM	
1250 CONNECTICUT AVENUE, NW				
SUITE 700			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20036			4192	
			MAIL DATE	DELIVERY MODE
			05/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/594,975	NAKAMURA, MASAHIRO
	Examiner	Art Unit
	ABDERRAHIM MEROUAN	4192

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 29 September 2006.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-20 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 29 September 2006 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>09/29/2006</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application
	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19 and 20 are rejected under 35 U. S. C. 101 because the claimed invention is directed to non-statutory subject matter as follows:

Claims 19 and 20 are directed explicitly to a computer program. Computer programs fail to fit any of the four statutory classes of invention.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 to 20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kinoe et al (U.S Patent 6337700 B1) hereinafter referred as Kinoe.

As per claim 1 Kinoe teaches:

An object display device, with regard to a product existing in a real space (Kinoe, Column 2, lines 38 to 39)

and being assembled by a plurality of components(Kinoe, Column 2, line 39), capable of

displaying the component as component object in a virtual space(Kinoe, Column 2, line 40) and of displaying an in-process product on an in-process stage(Kinoe, Column 10, lines 39 to 41) of the product by using the component objects(Kinoe, Column 2, lines 40- 42), the display device comprising:

object selection means for selecting a component object to be displayed in the virtual space(Kinoe, Column 2, lines 54 to 56) out of the component objects constituting the in-process product object(Kinoe, Column 2, line 54), based on assembly procedure data showing an assembly procedure of the product ; (Kinoe, Column 2, lines 39 to 41) and object display means for displaying the component object(Kinoe, Column 4, lines 25 and 26) selected by the object selection means as a selected component object. (Kinoe, Column 2, lines 54 to 56)

3. As per claim 2 Kinoe teaches: The object display device according to claim 1, claim 2 adds into claim 1
wherein the assembly procedure data has role relation data showing a role relation between the components. (Kinoe, Column 3, lines 21 to 28)

4. As per claim 3 Kinoe teaches: The object display device according to claim 2, claim 3 adds into claim 2.

Wherein when the role relation between one component and the other component is in a relation that one of the one component and the other component (Kinoe, Column 3, lines 17 to 19) either partially or entirely conceals the other one of the components so

as to be invisible from outside, with the one component and the other component are assembled, (Kinoe, Column 4, lines 19 to 23, the non-display option means the user can't see the object from outside the display screen), data showing that one of the one component and the other component either partially or entirely conceals the other one of the components so as to be invisible from outside (Kinoe, Column 4, lines 36 to 42) is set in the role relation data related to the one component and the other component, (Kinoe, Column 4, lines 29 to 34) whereby the object selection means is adapted to refer to the role relation data (Kinoe, Column 4, lines 1 to 5) and to select the component object related to the component of covering side out of the one component and the other component. (Kinoe, Column 10, lines 29 to 30)

5. As per claim 4 Kinoe teaches: The object display device according to claim 2, claim 4 adds into claim 2.

comprising role relation data setting support means(Kinoe, Column 9, lines 31 to 34) that supports to urge designation of a setting target component which is a setting target of the role relation data(Kinoe, Column 9, lines 31 to 34), to determine whether or not the component object corresponding to the setting target component that receives the designation is displayable to the component object corresponding to the other component(Kinoe, Column 9, lines 59 to 65), and to set either manually or automatically the role relation data on the other component in the setting target component based on a determination result thus obtained. (Kinoe, Column 9, lines 40 to 46 and lines 47 to

6. As per claim 5 Kinoe teaches: The object display device according to claim 4, claim 5 adds into claim 4.

wherein the role relation data setting support means comprises:

role relation determining data reception means for receiving the designation of the setting target component(Kinoe, Column 9, lines 35 to 38), which is the setting target of the role relation data(Kinoe, Column 9, lines 38 to 40), and the designation of time for determining the role relation(Kinoe, Column 12, lines 42 to 51), as role relation determining data for determining the role relation of the setting target component at the time thus designated(Kinoe, Column 9, lines 40 to 46);

role relation determination means for determining whether or not the setting target component has a role of covering the other component or being covered by the other component(Kinoe, Column 16 lines 38 to 41), by determining whether or not the display of the component object corresponding to the setting target component is performable to the component object corresponding to the other component(Kinoe, Column 16, lines 41 to 44); when the component object corresponding to the setting target component and the component object corresponding to the other component are displayed on a screen; and (Kinoe, Column 16, lines 25 to 28);

role relation data setting means for setting the role relation data showing that the setting target component has a role of covering side that covers the other component (Kinoe, Column 15, lines 49 to 51)when a determination result reveals that the display of the component object corresponding to the setting target component is performable to the

component object corresponding to the other component (Kinoe, Column 15, lines 51 to 55), and for setting the role relation data showing that the setting target component has a role of being covered by the other component (Kinoe, Column 14, lines 40 to 45) when the display of the component object corresponding to the setting target component is not performable to the component object corresponding to the other component. (Kinoe, Column 14, lines 45 to 47)

7. As per claim 6 Kinoe teaches: The object display device according to claim 5, claim 6 adds into claim 5.

Wherein the other component used for determination by the role relation determination means (Kinoe, Column 16, lines 15 to 18) is the component excepting the setting target component, out of all components designated by assembly procedure data (Kinoe, Column 16, lines 7 to 10) corresponding to time shown by the role relation determining data. (Kinoe, Column 16, lines 3 to 7)

8. As per claim 7 Kinoe teaches: The object display device according to claim 6, claim 7 adds into claim 6.

Wherein the role relation data setting support means further comprises:
common role relation calculation means for obtaining a common role relation in each assembly procedure by a calculation method such as AND operation, from the role relation obtained for each assembly procedure, and (Kinoe, Column 3, lines 28 to 34) when there are plural assembly procedures, (Kinoe, Column 16, line 48 to 51)

the role relation determination means is adapted to determine the role relation for each assembly procedure; (Kinoe, Column 16, lines 51 to 53)

the common role relation calculation means is adapted to obtain the common role relation from the role relation for each assembly procedure determined by the role relation determination means; and (Kinoe, Column 3, lines 15 to 18)

the role relation data setting means is adapted to set the common role relation obtained by the logic calculation means as role relation data. (Kinoe, Column 6, lines 1 to 9)

9. As per claim 8 Kinoe teaches: The object display device according to claim 1, claim 8 adds into claim 1

wherein

the component object is allowed to be designated by component object display data for displaying the component object in the virtual space(Kinoe, Column 4, lines 19 and 20), as well as by component object identification data capable of identifying the component. (Kinoe, Column 4, lines 21 and 22)

10. As per claim 9 Kinoe teaches: The object display device according to claim 8, claim 9 adds into claim 8

Wherein the component object identification data has metadata capable of reminding of the component or a prescribed concept regarding the component. (Kinoe, Column 9, lines 31 to 34)

11. As per claim 10 Kinoe teaches: The object display device according to claim 9, claim 10 adds into claim 9

Wherein the metadata is data obtained by generalizing a name of the component.

(Kinoe, Column 9, lines 34 and 35)

11. As per claim 11 Kinoe teaches: The object display device according to claim 8, claim 11 adds into claim 8

selected object identification data display means for displaying component object identification data related to the component object that has been selected by the object selection means. (Kinoe, Column 6, lines 42 to 47)

11. As per claim 12 Kinoe teaches: The object display device according to claim 8, claim 12 adds into claim 8

comprising:

non-selected object identification data display means for displaying the component object identification data related to the component object that has not been selected by the object selection means. (Kinoe, Column 16, lines 38 to 41)

12. As per claim 13 Kinoe teaches: The object display device according to claim 8, claim 13 adds into claim 8

wherein the component object display data is allowed to be communicated on a prescribed communication line, with assembly procedure data accompanied therewith; and (Kinoe, Column 9, lines 5 to 11)

the object selection means is adapted to select an appropriate component object by referring to the assembly procedure data accompanied with the component object display data. (Kinoe, Column 10, lines 42 to 46)

13. As per claim 14 Kinoe teaches: The object display device according to claim 8, claim 14 adds into claim 8

cooperation management means for cooperatively managing the component object display data and the assembly procedure data, wherein (Kinoe, Column 2, lines 39 to 41)

the object selection means is adapted to select the appropriate component object by referring to the assembly procedure data cooperatively managed by the cooperation management means. (Kinoe, Column 10, lines 41 to 43)

14. As per claim 15 Kinoe teaches: The object display device according to claim 8, claim 15 adds into claim 8

display object designation instruction reception means for receiving an instruction for designating the component object arbitrarily displayed in the virtual space, wherein (Kinoe, Column 10, lines 42 to 46)

the object display means is adapted to be capable of displaying the component object(Kinoe, Column 4, lines 21 to 22) designated by the instruction received by the display object designation instruction reception means, together with the selected component object or replacing the selected component object. (Kinoe, Column 4, lines 27 to 29)

15. As per claim 16 Kinoe teaches: The object display device according to claim 8, claim 16 adds into claim 8

wherein the component object is adapted to be able to display selectively in a prescribed display mode (Kinoe, Column 3, lines 25 to 28)or a simplified display mode which is more simplified than the prescribed display mode; (Kinoe, Column 10, lines 29 to 32) and

the object display means(Kinoe, Column 10, line 42) is adapted to be capable of displaying the component object that has been selected by the object selection means in the prescribed display mode, (Kinoe, Column 10, lines 46 to 49) and the component object that has not been selected by the object selection means in the simplified display mode. (Kinoe, Column 16, lines 38 to 41)

16. As per claim 17 Kinoe teaches: The object display device according to claim 16, claim 17 adds into claim 16 comprising:

display mode designation instruction reception means (Kinoe, Column 9, lines 38 to 40) for receiving an instruction to designate the display mode of the component object (Kinoe, Column 9, lines 62 to 65), wherein the object display means (Kinoe, Column 10, lines 42 to 46) is adapted to be capable of displaying the component object in the display mode designated (Kinoe, Column 9, lines 62 to 65) by the instruction received by the display mode designation instruction reception means. (Kinoe, Column 9, lines 38 to 40)

18. As per claim 18 Kinoe teaches:

An object display device, with regard to a product object existing in a virtual space (Kinoe, Column 2, line 40) and being assembled by a plurality of component objects (Kinoe, Column 2, line 39), capable of displaying an in-process product on in-process stage of the product object in the virtual space by using the component objects (Kinoe, Column 2, lines 39 to 40), the object display device comprising: object selection means for selecting the component object to be displayed in the virtual space (Kinoe, Column 2, lines 54 to 56), out of the component objects constituting the in-process product object (Kinoe, Column 2, line 54, based on assembly procedure data showing an assembly procedure of the product object (Kinoe, Column 2, lines 56 to 59); and object display means for displaying the component object (Kinoe, Column 4, lines 25 and 26) selected by the object selection means as a selected component object. (Kinoe, Column 2, lines 54 to 56)

19. As per claim 19 Kinoe teaches:

An object display program having a computer operate, with regard to a product existing in a real space(Kinoe, Column 2, lines 38 to 39) and being assembled by a plurality of components(Kinoe, Column 2, line 39, capable of displaying the component as component object in a virtual space (Kinoe, Column 2, line 40and of displaying an in-process product on an in-process stage (Kinoe, Column 10, lines 39 to 41)of the product by using the component objects(Kinoe, Column 2, lines 40- 42), the program causing the computer to function as:
object selection means for selecting the component object to be displayed in the virtual space (Kinoe, Column 2, lines 54 to 56)out of the component objects constituting the in-process object(Kinoe, Column 2, line 54, based on assembly procedure data showing an assembly procedure of the product (Kinoe, Column 2, lines 56 to 59; and object display means for displaying in the virtual space(Kinoe, Column 4, lines 25 and 26) the component object selected by the object selection means as *a selected component object.* (Kinoe, Column 2, lines 54 to 56)

20. As per claim 20 Kinoe teaches:

An object display program having a computer operate, with regard to a product object existing in a virtual space(Kinoe, Column 2, lines 39 and 40) and being assembled by a plurality of component objects, (Kinoe, Column 2, line 38) capable of displaying an in-process product object on an in-process stage (Kinoe,

Column 10, lines 39 to 41 of the product object by using the component objects(Kinoe, Column 2, lines 40- 42), the program causing the computer to function as: object selection means for selecting the component object to be displayed in the virtual space(Kinoe, Column 2, lines 54 to 56) out of the component objects constituting the in-process object(Kinoe, Column 2, line 54), based on assembly procedure data showing an assembly procedure of a product object(Kinoe, Column 2, lines 56 to 59); and object display means for displaying the component object (Kinoe, Column 4, lines 25 and 26)selected by the object selection means in the virtual space as a selected component object. (Kinoe, Column 2, lines 54 to 56)

Conclusion

21. Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABDERRAHIM MEROUAN whose telephone number is

(571)270-5254. The examiner can normally be reached on Monday to Friday 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pankaj Kumar can be reached on (571) 272-3011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Abderrahim Merouan

Examiner

Art Unit 4192

/Almis R Jankus/

Primary Examiner, Art Unit 2628